

REMARKS

Please reconsider the application in view of the above amendments and the following remarks. Applicant thanks the Examiner for carefully considering this application.

Disposition of Claims

Claims 48-52, 55-56, 59-60, 62-63, and 65-83 are pending. Claims 53, 54, 57, 58, 61, and 64 are canceled by this reply without prejudice or disclaimer. Claims 65-83 are newly added. Claims 48, 56, 63, and 77 are independent. The remaining claims depend, directly or indirectly, from claims 48, 56, 63, and 77.

Claim Amendments

Independent claims 48, 56, and 63 are amended to clarify aspects of the invention. No new matter is added by way of these amendments, as support is found at least on page 28, lines 10-15, page 30 lines 1-27, and on page 32 line 8 to page 33 line 1 of the PCT application as published.

Rejection(s) under 35 U.S.C. § 103

Claims 48-49, 51-57, and 59-63 are rejected under 35 U.S.C. § 103(a) as being unpatentable over DVB in view of Menand (US Patent No. 5,539,920). Claims 53-54, 57, and 61 are canceled; thus, this rejection is moot with respect to these claims. For the remaining amended claims, this rejection is respectfully traversed.

MPEP § 2143 states that “[t]he key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in KSR noted that the analysis supporting a rejection under 35

U.S.C. 103 should be made explicit.” Further, when combining prior art elements, the Examiner “must articulate the following: (1) a finding that the prior art included each element claimed, although not necessarily in a single prior art reference, with the only difference between the claimed invention and the prior art being the lack of actual combination of the elements in a single prior art reference....” MPEP § 2143(A).

The amended independent claims require, in part, (i) an application data table (ADT) across a plurality of services that includes each application carried by each service; and (ii) where the ADT includes a list of applications carried by each of the plurality of services, and indicates whether a given application is carried by more than one service.

It is clear from the Office Action that the Examiner reads the claimed “application” as being equivalent to the term “program” as used in the DVB reference. *See Action*, page 3. Applicant respectfully disagrees with the Examiner’s interpretation, as the Examiner’s interpretation is incorrect for at least the following reasons. The Examiner is required to read the claimed limitations in light of the Specification. In particular, “[t]he person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but *in the context of the entire patent, including the specification.*” *See Phillips v. AWH Corp.*, 415 F.3d 1303 at 1313 (Fed. Cir. 2005) (*en banc*) (emphasis added). Based on *Phillips* and as clearly described in the Specification, an “application” is an executable piece of software. *See Specification*, page 16, ll. 26-32 and page 25, ll. 26-28. Moreover, the Specification clearly defines an application and a broadcast program as two distinct entities. This is clear from the use of the terms “program(s)” and “application(s)” separately and in distinct contexts. Accordingly, in view of *Phillips*, an application as used in the claimed invention is *software that is downloaded and executed by the decoder*. As will be described

below, the prior art, whether taken alone or in combination, fails to render obvious such an application.

Specifically, DVB defines the term ‘program’ (actually ‘programme’) as being “a concatenation of one or more events..., e.g., news show, entertainment show” (see page 5 of DVB). Thus an application, let alone an executable one, cannot be read on a ‘programme’ in DVB. Note that the term ‘event’ is also defined on page 5 of DVB as meaning “a grouping of elementary broadcast data streams with a defined start and end time belonging to a common service, e.g., first half of a football match, News Flash, first part of an entertainment show.” Again, this has nothing to do with an application. Reading ‘application’ on ‘program(me)’ is thus incompatible with the teaching of the DVB document, as well as to those of ordinary skill in the art. In fact, equating the term “application” as claimed to the program(me)s of DVB requires the Examiner to mischaracterize the claimed invention or to read out specific limitations of the independent claims, both of which are wholly improper.

As DVB fails to disclose an application as claimed, it logically follows that no program table in DVB can possibly be equated with the application data table of the claimed invention. Accordingly, DVB fails to disclose or render obvious an application and an application data table.

Further, the Examiner makes reference to the document ETR 211 ('Digital Video Broadcasting (DVB): Guidelines on implementation and usage of Service Information (SI)'), page 19, § 4.2.2.2.1., contending that this section discloses ‘that the BAT discloses a service list descriptor [...] comprising a list of applications carried by each of a plurality of services’ (page 3 of the Office Action of March 18, 2010). The actual section 4.2.2.2.1 of ETR 211 is as recites as follows:

4.2.2.2.1 Service list descriptor

This descriptor is used to list the services and service types for each TS that belong to the bouquet of this section. This allows to find all services that belong to a specific bouquet. The service_list_descriptor is allowed only once in each loop. It should be transmitted if a BAT exists.

There is nothing in this section that supports the Examiner's assertion. The BAT table as disclosed on DVB is purely a list of services belonging to a bouquet, such as a channel list for a given operator. Further, the cited section of the ETR fails to disclose or render obvious the claimed limitations of (1) transmission of application data in a plurality of services carried in a digital transport stream, each of said plurality of services carrying at least one application, (2) providing a single application data table containing information regarding each of said at least one application carried by each service among said plurality of services, wherein the at least one application is an executable application configured to execute on a decoder, and (3) wherein the single application data table a list of applications carried by each of the plurality of services and indicates whether a given application is carried by more than one service. In other words, with the exception that a 'table' is transmitted in a digital transmission system, there is no common feature between DVB and the claimed invention. Accordingly, it is clear that DVB fails to disclose or render obvious the limitations required by (i) and (ii) above.

Further, Menand fails to supply that which DVB lacks. Menand discloses an AVI system in which data modules are sent in a continuously repeated fashion in a digital multiplex containing audio and video data. Menand et al. does not disclose an application table comprising a list of applications carried by each of the plurality of services. In contrast, in Menand, a directory module has to be loaded each time that the user changes 'channels' or even when within one channel, a certain broadcast is transmitted (*e.g.*, an interactive commercial). See Menand, col. 6, lines 36 to 45. As a consequence, even if two subsequently loaded directory modules represent the same application, the decoder has first to minimize the application by deallocating resources, load the new directory module, determine that the new directory module

identifies a minimized application and then reload the application. *See* Menand, col. 6, lines 46 to 64. Hence, Menand, whether considered alone or in combination with DVB-SI, does not provide the features of the claimed invention that are required by (i) and (ii) above.

In view of the above, it is clear that the Examiner's contentions fail to support an obviousness rejection of the amended independent claims. Pending dependent claims are patentable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

Claims 50, 58, and 64 are rejected under 35 U.S.C. § 103(a) as being unpatentable over DVB and Menand in view of US Patent No. 6,526,508 ("Akins"). Claims 58 and 64 are canceled; thus, this rejection is moot with respect to these claims. To the extent that this rejection may still apply to claim 50, this rejection is respectfully traversed.

As described above, DVB and Menand fail to disclose or render obvious the limitations of amended independent claims 48, 56, and 63. Further, Akins fails to disclose or otherwise provide that which DVB lacks. Specifically, Akins fails to disclose or render obvious an application data table (ADT) comprising an application description part and a service description part that includes characteristics for each application that are taken into account when a user switches between services. In fact, Akins only discloses security measurements implemented for downloaded applications. *See* Akins, col. 5, ll. 41-59.

In view of the above, it is clear that the Examiner's contentions fail to support an obviousness rejection of amended independent claims 48 and 56. Pending dependent claims 50, 58, and 64 are patentable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

New Claims 65 – 83

Claims 65-83 are newly added. New dependent claims 65-76, depend, directly or indirectly, from claims 48 and 63. Claim 77 is a new independent method claim from the receiving side. Claims 78-83 depend from claim 77. No new matter is added by way of the new claims, as support is found, for example, in the originally filed claims, on page 28, lines 10-15, page 30 lines 1-27, and page 32 line 8 to page 33 line 1 of the PCT application as published.

Applicant asserts that new independent claim 77 is patentable for at least the same reasons discussed above with respect to independent claims 48, 56, and 63, as claim 77 contains substantially similar limitations as argued above with respect to the other independent claims. Accordingly, an obviousness rejection of new independent claim 77 is not supported by the cited prior art for all of the same reasons discussed above.

With respect to the dependent claims, Applicant hereby asserts the separate patentability of dependent claims 65-83 over the cited prior art, for at least the reasons that follow.

Claim 65-67 and 69-70 recite that application data table further comprises information linking each application carried by said plurality of services to parameters describing the application and define what those parameters may be. The BAT of DVB merely includes a service list descriptor that identifies the services available in each bouquet of programs, where the services are identified by a service identifier and a service type. However, neither the service identifier nor the service type stored in the service list descriptor of DVB are mapped to characteristics of the service, or parameters that describe the service. Menand also fails to disclose these limitations. As there is no decision that is made by a decoder in Menand, it follows that there is no need to evaluate characteristics of applications to make a decision on whether to delete, maintain, or download applications. Thus, parameters of an application that are stored in an ADT would not be useful in the system of Menand. Further, claim 69 recites

resource allocation by a decoder. In Menand, applications deallocate resources when a directory module becomes obsolete. However, Menand does not teach associating a priority with an application for accessing resources of the decoder compared to other applications because the resource deallocation of Menand does not depend on the priority of another application (*i.e.*.. Menand et al. does not disclose priorities between applications or *relative* priority levels).

New dependent claims 71-76, 78-80, and 82-83 recite similar features as claims 65-67 and 69-70, and are separately patentable over the cited prior art for at least the same reasons.

Claim 68 recites detecting a command of change from a present service to a second service; based on the information in the application data table, determining whether a given application is carried by the present service and the second service; and maintaining or not said given application based on said determination. There is no disclosure or suggestion in either DVB or Menand of to determine if two distinct services have an application in common and subsequently basing a decision of whether to maintain the application on that determination. In fact, both DVM and Menand are silent with respect to such decision-making by a decoder in which two services, one from which the user is switching to the other, are examined to determine if an application is carried in common to both services. New dependent claim 81 recites similar subject matter as new claim 68, and is thus patentable for at least the same reasons.

In view of the above, none of DVB, Menand, and Akins disclose or render obvious the limitations of new dependent claims 65-83. Accordingly, favorable consideration of these new dependent claims is respectfully requested.

Conclusion

Applicant believes this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 11345/030001).

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